

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appl. No. : 10/682,127 Confirmation No. 1350  
Applicant : Sirinyan et al.  
Filed : October 9, 2003  
Title : DERMALLY APPLICABLE LIQUID FORMULATIONS FOR  
CONTROLLING PARASITIC INSECTS ON ANIMALS  
Group Art Unit : 1615  
Examiner : NEIL S LEVY  
Docket No. : LeA 35172

**VIA EFS**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

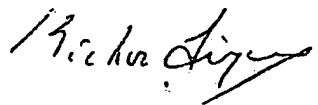
**DECLARATION OF KIRKOR SIRINYAN UNDER 37 C.F.R. §1.132**

Dr. Kirkor Sirinyan declares and states as follows:

1. I am one of the named co-inventors of the subject matter of the above-identified patent application.
2. I received a Master of Science degree in Chemistry from Berlin University, in 1976. Thereafter, I received a Doctorate in Chemistry from Berlin University in 1980.
3. In 1981 I started my career as a chemist at Bayer AG. From 1993 to date, I have been employed in the department of formulation technology in the Animal Health Division first of Bayer AG, Germany and - due to the reorganization of the Bayer group - since 2003 of Bayer HealthCare AG, Germany. My present position is Manager of Formulation Technology in the formulation department in Monheim, Germany.

4. The formulation department in Monheim is part of the research and development department of the Animal Health Division.
5. The department of research and development for Bayer Animal Health, Monheim, Germany and the department of research and development for Bayer Animal Health, Shawnee, KS, US collaborate closely on numerous projects.
6. Prior to May 2000, several discussions were conducted between Germany and the US discussing potential formulations of pest control compounds that could be used to treat both fleas and ticks. I was involved in many of those discussions and development work flowing out of them, as was Robert Arther, from Bayer Animal Health in Shawnee, KS, who is named as the inventor of U.S. Application 09/727,117, filed November 30, 2000. It was finally decided that the formulation should include two active ingredients, permethrin and imidacloprid. A concept of this combination is disclosed and claimed in U.S. Application 09/727,117.
7. To ensure that the formulation had desirable properties including low viscosity and spreadability on an animal's fur, a solvent that could solubilize both actives was required. I and several colleagues from Bayer Animal Health, Monheim were involved in developing particular formulations, including solvents, for the use of these two ingredients. The chemistry of these two ingredients is different, and determining a solvent that would work well with both of them together was challenging. After testing other solvents, in May 2000, I selected N-methylpyrrolidone (NMP) as a candidate and tested formulations that included NMP in combination with the actives. I found that NMP provided the desired properties for the formulation and solubilized the actives. I conceived, invented, and made the formulations containing NMP, such as are disclosed and claimed in the present application (U.S. Serial No. 10/682,127), in August 2000.

8. On September 11, 2000, Dr. Guenther Werner, the project manager for this formulation project in Monheim, Germany, disclosed to my German and US colleagues in the department of research and development at Bayer, including Robert Arther, that my particular formulation for these two active ingredients, imidacloprid and permethrin, included NMP.
9. As such, I am the inventor of the use of NMP as a solvent for permethrin and imidacloprid, as is disclosed, but not claimed, in US Application No. 09/727,117 to Robert Arther.
10. The applicant further declares that all statements made herein are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application or any patent issuing therefrom.



Dr. Kirkor Sirinyan

18/Dec./2007

Date